

Broadview/Bitter Lake/Haller Lake Neighborhood

December 2010
Drainage & Sewer

Location

Densmore Basin

- 2,166-acres; extends from Green Lake to N 145th Street and from 3rd Avenue NW to 1st Ave NE.
- Contains Seattle's only inland lakes - Haller, Bitter, and Green
- Sub-basins: Bitter Lake, Stone Avenue, Haller Lake, Lower Densmore
- Bitter Lake subbasin - 434 acres; bounded by N 145th Street, 3rd Avenue NW, Aurora Avenue N, and N 109th Street

Piper's Creek Watershed

- In the central to north Greenwood area is joined by Venema and Mohlendorph Creeks in Carkeek Park.
- Drains a 1,835-acre watershed into Puget Sound, from a residential upper plateau that is most of the watershed, through the steep ravines of the 216 acres (0.9 km²) of Carkeek Park.
- 200 to 600 chum salmon return each November, along with a few coho in the fall and fewer occasional winter steelhead. Several hundred small resident cutthroat trout live in the watershed,

History

The Broadview/Bitter Lake/Haller Lake area was a timbered land of Douglas fir and cedar, often eight feet in diameter, inhabited by Native American lake people who gathered and fished from abundant resources. Settlement began after Seattle's Great Fire in June 1889. Bitter Lake obtained its name due to the presence of tannic acid and its history as a holding pond for logs by the sawmill which was located on the west shore. The Bitter Lake Sawmill remained active until 1913, by which time the forests were dwindling and logged out. In 1930 a "Playland" was developed privately consisting of amusement rides. In 1968 a Supreme Court Decision ordered a half-built apartment complex be removed from the lake area: all water oriented rights must be shared without interference among all owners of lake.

Drainage & Sewers

- Sewers are almost all separated – stormwater is routed through drain pipes and ditch systems
- Combination of ditches and culverts in the residential and commercial neighborhoods and routed to a trunk system along the major transportation corridors.
- Runoff from this area drains through Green Lake to the Ship Canal.
 - Discharge to Green Lake is equipped with a low flow diversion and pump station, constructed and operated by King County, to route low flows from the Densmore basin around Green Lake, directly to Lake Union. Higher storm flows pass through the lake before discharging the Ship Canal via the King County system.

Rules of Thumb for Future Development/Redevelopment

- Capacity constraint along trunk system at N 107th & Midvale Avenue North necessitates extra scrutiny for new drainage to the north
- Areas with ditches and culverts have potential drainage issues with increased impervious area and stormwater flows
- Looking to creatively increase detention and infiltration using green stormwater infrastructure
- Important to continue education on use of fertilizers, pesticides, and pet waste for water quality

Known issue areas (see wall map for existing projects)

- Side sewer issues on 6th Ave NW and 12th Ave NW between NW 125th and NW 120th.
- Street and property flooding on Aurora Ave N between N 137th Street and N 110th Street
- Haller Lake/Meridian Ave N street flooding.
- Stone Ave N flooding from Roosevelt Way N to N. 135th Street
- Property flooding between N 130th Street and N 125th Street

- N 128th Street & North Park Ave N
 - Frequent flooding of homes and properties due to inadequate capacity of the ditch and culvert system. Results in flooding along Northpark Avenue N, N 128th Street, and in the Linden right-of-way
- N 125th Street
 - Flooding reported during moderate storms just west of Aurora Avenue N where a 24-inch-diameter storm drain pipe discharges into a 12-inch-diameter storm drain pipe. Surcharging of the pipe system in the street backs up into the Lowe's drainage system, causing overtopping of the Lowe's on-site detention vault.
- Stormwater outfall at north end of Bitter Lake (SPU-owned)
 - Sediment accumulation issues, difficult to remove sediment, docks become unusable, potential water quality issues from stormwater input

Resources:

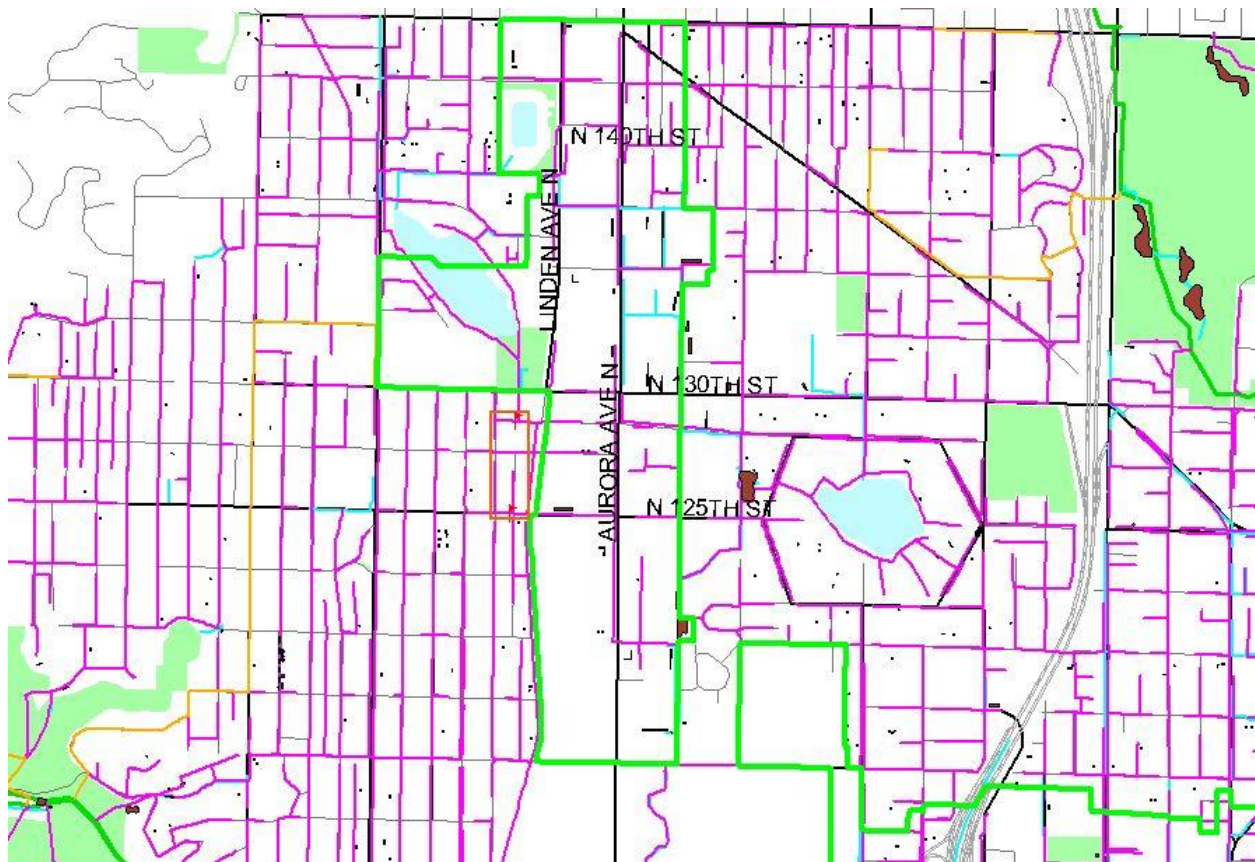
Densmore Basin Study, 2003

Comprehensive Drainage Plan, 2004

For more information, contact:

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Below: Drainage and Sewer systems



Pink: Sanitary sewer; Orange: Combined sewer; Light blue: Drainage pipes; Light green: Basin boundaries